
Rufin VANRULLEN

Preprints (under review)

1. Butlin, P., Long, R., Elmoznino, E., Bengio, Y., Birch, J., Constant, A., Deane, G., Fleming, S. M., Frith, C., Ji, X., Kanai, R., Klein, C., Lindsay, G., Michel, M., Mudrik, L., Peters, M. A., Schwitzgebel, E., Simon, J., & VanRullen, R. (2023). Consciousness in Artificial Intelligence: Insights from the Science of Consciousness. arXiv. /abs/2308.08708
2. Devillers, B., Maytié, L., & VanRullen, R. (2023). Semi-supervised Multimodal Representation Learning through a Global Workspace. arXiv. /abs/2306.15711
3. Ozelik, F., & VanRullen, R. (2023). Natural scene reconstruction from fMRI signals using generative latent diffusion. arXiv. /abs/2303.05334
4. Ferrante, M., Ozelik, F., Boccato, T., VanRullen, R., & Toschi, N. (2023). Brain Captioning: Decoding human brain activity into images and text. arXiv. /abs/2305.11560
5. Decourt, C., VanRullen, R., Salle, D., & Oberlin, T. (2022). A recurrent CNN for online object detection on raw radar frames. arXiv. /abs/2212.11172
6. Chalvidal, M., Serre, T., & VanRullen, R. (2023). Learning Functional Transduction. arXiv. /abs/2302.00328

Peer-reviewed Articles since 2016

1. Faye, G., Foulhé, G., & VanRullen, R. (2023). Mathematical derivation of wave propagation properties in hierarchical neural networks with predictive coding feedback dynamics. *Bull Mathematical Biology*, 85:80
2. Alamia, A., & VanRullen, R. (2023). A Traveling Waves Perspective on Temporal Binding. *J Cogn Neurosci*, (in press).
3. Bielawski, R., & Vanrullen, R. (2023). CLIP-based image captioning via unsupervised cycle-consistency in the latent space. ACL 2023: 8th Workshop on Representation Learning for NLP (*RepL4NLP 2023*), 266-275.
4. Alamia, A., Terral, L., D'ambra, M. R., & VanRullen, R. (2023). Distinct roles of forward and backward alpha-band waves in spatial visual attention. *Elife*, 12, e85035.
5. Chota, S., VanRullen, R.* & Gulbinaite, R.* (2023). Random tactile noise stimulation reveals beta-rhythmic impulse response function of the somatosensory system. *J Neurosci*, 43(17), 3107-3119 .
6. Alamia, A., Mozafari, M., Choksi, B., & VanRullen, R. (2022). On the role of feedback in image recognition under noise and adversarial attacks: A predictive coding perspective. *Neural Networks*. doi: 10.1016/j.neunet.2022.10.020
7. Chalvidal, M., Serre, T., & VanRullen, R. (2022). Meta-Reinforcement Learning with Self-Modifying Networks. *NeurIPS 2022: Advances in Neural Information Processing Systems*, arXiv:2202.02363.
8. Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2022). Multimodal neural networks better explain multivoxel patterns in the hippocampus. *Neural Networks*. doi: 10.1016/j.neunet.2022.07.033
9. Ozelik, F., Choksi, B., Mozafari, M., Reddy, L., & VanRullen, R. (2022). Reconstruction of perceived images from fMRI patterns and semantic brain exploration using Instance-Conditioned GANs. *Int. Joint Conf. Neural Networks (IJCNN)*.
10. VanRullen, R. (2022). Deep learning in alternate reality. *Nature Human Behaviour*, 6(1), 27-28.
11. Vaishnav, M., Cadene, R., Alamia, A., Linsley, D., VanRullen, R., & Serre, T. (2022). Understanding the computational demands underlying visual reasoning. *Neural Computation*, 34 (5), 1075-1099
12. Merholz, G., Grabot, L., VanRullen, R., & Dugué, L. (2022). Periodic attention operates faster during more complex visual search. *Scientific Reports*, 12(1), 1-14.
13. Bielawski, R., Devillers, B., Van de Cruys, T., & VanRullen, R. (2022). When does CLIP generalize better than unimodal models? When judging human-centric concepts. ACL 2022: 7th workshop on *Representation Learning for NLP* (Rep4NLP 2022), 29-38
14. Decourt, C., VanRullen, R., Salle, D., & Oberlin, T. (2022). DAROD: a deep automotive radar object detector on range-doppler maps. *Proceedings of the 33rd IEEE Intelligent Vehicles Symposium* (IV 2022), 112-118.
15. Fakche, C., VanRullen, R., Marque, P., & Dugué, L. (2022). Alpha Phase-Amplitude Tradeoffs Predict Visual Perception. *eNeuro*, 9(1).
16. Luo, C., Chen, W., VanRullen, R., Zhang, Y., & Gaspar, C. M. (2022). Nudging the N170 forward with prior stimulation—Bridging the gap between N170 and recognition potential. *Human brain mapping*, 43(4), 1214-1230.
17. Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A., & VanRullen, R. (2021). Predify: Augmenting deep neural networks with brain-inspired predictive coding dynamics. *NeurIPS 2021: Advances in Neural Information Processing Systems*, 34.
18. Pang, Z., Biggs O'May, C., Choksi, B. & VanRullen, R. (2021). Predictive coding feedback results in perceived illusory contours in a recurrent neural network. *Neural Networks*. doi: 10.1016/j.neunet.2021.08.024.
19. VanRullen, R., & Kanai, R. (2021). Deep learning and the Global Workspace Theory. *Trends in Neurosciences*. 44(9), 692-704
20. VanRullen, R., & Alamia, A. (2021). GAttANet: Global attention agreement for convolutional neural networks. *Lecture Notes in Computer Science: Artificial Neural Networks and Machine Learning*, 12891, 1-11.
21. Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2021). Multimodal neural networks better explain multivoxel patterns in the hippocampus. In Neural Information Processing Systems (NeurIPS) conference: 3rd Workshop on *Shared Visual Representations in Human and Machine Intelligence* (SVRHM 2021).
22. Reddy, L., Self, M.W., Zoefel, B., Poncet, M., Possel, J.K., Peters, J.C., Baayen, J.C., Idema, S., VanRullen, R. and Roelfsema, P.R., (2021). Theta-phase dependent neuronal coding during sequence learning in human single neurons. *Nature Communications*, 12(1), 1-9.
23. Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021). Does language help generalization in vision models? *CoNLL2021: Proceedings of the 25th Conference on Computational Natural Language Learning*, 171-182.
24. Reddy, L., Cichy, R. M., & VanRullen, R. (2021). Representational content of oscillatory brain activity during object recognition: contrasting cortical and deep neural network hierarchies. *eNeuro*, 8(3).

25. Chalvidal, M., Ricci, M., VanRullen, R., & Serre, T. (2021). Go with the flow: Adaptive control for Neural ODEs. *ICLR 2021: International Conference on Learning Representations*.
26. Luo, C., Brüers, S., Berry, I., VanRullen, R., & Reddy, L. (2021). Tentative fMRI signatures of perceptual echoes in early visual cortex. *NeuroImage*, 237, 118053.
27. Luo, C., VanRullen, R., & Alamia, A. (2021). Conscious perception and perceptual echoes: a binocular rivalry study. *Neuroscience of Consciousness*, 2021(1), niab007.
28. Chota, S., Marque, P., & VanRullen, R. (2021). Occipital Alpha-TMS causally modulates Temporal Order Judgements: Evidence for discrete temporal windows in vision. *NeuroImage*, 237, 118173.
29. Alamia, A., Luo, C., Ricci, M., Kim, J., Serre, T., & VanRullen, R. (2020). Differential involvement of EEG oscillatory components in sameness vs. spatial-relation visual reasoning tasks. *eNeuro*
30. Alamia, A., Timmermann, C., Nutt, D. J., VanRullen, R.*, & Carhart-Harris, R. L.* (2020). DMT alters cortical travelling waves. *eLife* 9, e64623.
31. Pang, Z., Alamia, A., & VanRullen, R. (2020). Turning the Stimulus On and Off Changes the Direction of α Traveling Waves. *eNeuro* 7(6).
32. Alamia, A., Gauducheu, V., Paisios, D., & VanRullen, R. (2020). Comparing feedforward and recurrent neural network architectures with human behavior in artificial grammar learning. *Scientific Reports* 10(1), 1-15.
33. Schwenk, J. C., VanRullen, R., & Bremmer, F. (2020). Dynamics of visual perceptual echoes following short-term visual deprivation. *Cerebral Cortex Communications*.
34. Mozafari, M., Reddy, L., & VanRullen, R. (2020). Reconstructing Natural Scenes from fMRI Patterns using BigBiGAN. *Int. Joint Conf. Neural Networks (IJCNN)*.
35. Chota, S., McLelland, D., Laverne, L., Zimmermann, E., Cavanagh, P., & VanRullen, R. (2020). Full Field Masking Causes Reversals in Perceived Event Order. *Front. Neurosci.*, 14, 217.
36. Gaillard, C., Hassen, S. B. H., Di Bello, F., Bihan-Poudec, Y., VanRullen, R., & Hamed, S. B. (2020). Prefrontal attentional saccades explore space rhythmically. *Nature Comm*, 11(1), 1-13.
37. Alamia, A., & VanRullen, R. (2019). Alpha oscillations and traveling waves: Signatures of predictive coding? *PLoS Biol.*, 17(10).
38. VanRullen, R., Reddy, L. (2019). Reconstructing faces from fMRI patterns using deep generative neural networks *Communications Biology* 2(1), 193.
39. Gulbinaite, R., Roozendaal, D. H. M., & VanRullen, R. (2019). Attention differentially modulates the amplitude of resonance frequencies in the visual cortex. *Neuroimage*, 203(116146).
40. Alamia, A., VanRullen, R., Paqualato, E., Mouraux, A., Zenon, A. (2019). Pupil-linked arousal responds to unconscious surprisal. *J Neurosci*, 39(27), 5369-5376.
41. Dugué, L., Beck, A., Marque, P. & VanRullen, R. (2019). Contribution of FEF to attentional periodicity during visual search: a TMS study. *eNeuro*, 6(3).
42. Chota, S. & VanRullen, R. (2019). Visual entrainment at 10 Hz causes periodic modulation of the flash lag illusion. *Front. Neurosci.* 13(232).
43. Lozano-Soldevilla, D. & VanRullen, R. (2019). The hidden spatial dimension of alpha: 10 Hz perceptual echoes propagate as periodic travelling waves in the human brain. *Cell Reports*, 26(2), 374-380.
44. Alamia, A., Zenon, A., VanRullen, R., Duque, J. & Derosiere, G. (2018). Implicit visual cues tune oscillatory motor activity during decision-making. *Neuroimage*, 186, 424-436.
45. Chota, S., Luo, C., Crouzet, S.M., Boyer, L., Kienitz, R., Schmid, M.C. & VanRullen, R. (2018). Rhythmic fluctuations of saccadic reaction time arising from visual competition. *Scientific Reports* 8(1), 15889
46. VanRullen, R. (2018). Attention cycles. *Neuron*, 99(4), 632-634.
47. Bruers, S. & VanRullen, R. (2018). Alpha Power Modulates Perception Independently of Endogenous Factors. *Front. Neurosci.* 12:279.
48. Baures, R., Balestra, M., Rosito, M. & VanRullen, R. (2018). The detrimental influence of attention on time-to-contact perception. *Att. Percept. Psychophys.* 80(6), 1591-1598.
49. Benedetto, A., Lozano-Soldevilla, D. & VanRullen, R. (2018). Different responses of spontaneous and stimulus-related alpha activity to ambient luminance changes. *Eur J Neurosci*, 48(7), 2599-2608.
50. Edwards, G., VanRullen, R. & Cavanagh, P. (2018). Decoding trans-saccadic memory. *J Neurosci* 38(5), 1114-1123.
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52. Gulbinaite, R., Ilhan, B. & VanRullen, R. (2017). The triple-flash illusion reveals a driving role of alpha-band reverberations in visual perception. *J Neurosci* 37(30), 7219-7230.
53. Chang, A., Schwartzman, D.J., VanRullen, R., Kanai, R. & Seth, A.K. (2017). Visual perceptual echo reflects learning of regularities in rapid luminance sequences. *J Neurosci* 37(35), 8486-8497.
54. Brüers, S. & VanRullen, R. (2017). At what latency does the phase of brain oscillations influence perception? *eNeuro* 4(3):e0078-17.2017.
55. Dugué, L. & VanRullen, R. (2017). Transcranial Magnetic Stimulation reveals intrinsic perceptual and attentional rhythms. *Front. Neurosci.* 11:154.
56. Zoefel, B. & VanRullen, R. (2017). Oscillatory mechanisms of stimulus processing and selection in the visual and auditory systems: State-of-the-art, speculations and suggestions. *Front. Neurosci.* 11:296.
57. Edwards, G., Paeye, C., Marque, P., VanRullen, R. & Cavanagh, P. (2017). Predictive position computations mediated by parietal areas: TMS evidence. *Neuroimage* 153, 49-57
58. VanRullen, R. (2017). Perception Science in the age of Deep Neural Networks. *Front. Psychology* 8:142.
59. Zoefel, B., Costa-Faidella, J., Lakatos, P., Schroeder, C.E. & VanRullen, R. (2017). Characterization of neural entrainment to speech with and without slow spectral energy fluctuations in laminar recordings in monkey A1. *NeuroImage* 150, 344-357.
60. Han, B. & VanRullen, R. (2017). The rhythms of predictive coding? Pre-stimulus phase modulates the influence of shape perception on luminance judgments. *Scientific Reports* 7, 43573.
61. VanRullen, R. (2016). Perceptual cycles. *Trends Cogn Sci* 20(10), 723-735.

62. **McLelland, D. & VanRullen, R. (2016).** Theta-Gamma Coding Meets Communication-through-Coherence: Neuronal Oscillatory Multiplexing Theories Reconciled. *PLoS Comput Biol* 12(10), e1005162
63. **Sun, H-M., Inyutina, M., VanRullen, R. & Wu, C-T. (2016).** The temporal advantage for reloading vs. uploading conscious representations decays over time. *Neurosci Conc* 216(1), niw017.
64. **VanRullen, R. (2016).** How to evaluate phase differences between trial groups in ongoing electrophysiological signals. *Front. Neurosci* 10:426.
65. **Sherman, M. T., Kanai, R., Seth, A. K., & VanRullen, R. (2016).** Rhythmic influence of top-down perceptual priors in the phase of pre-stimulus occipital alpha oscillations. *J Cogn Neurosci*, 28(9), 1318-1330.
66. **McLelland, D., Lavergne, L. & VanRullen, R. (2016).** The phase of ongoing EEG oscillations predicts the amplitude of peri-saccadic mislocalization. *Scientific Reports* 6, 29335.
67. **Sokoliuk, R. & VanRullen, R. (2016).** Global and local oscillatory entrainment of visual behavior across retinotopic space. *Scientific Reports* 6, 25132.
68. **Han, B. & VanRullen, R. (2016).** Shape perception enhances perceived contrast: evidence for excitatory predictive feedback? *Scientific Reports* 6, 22944.
69. **Miconi, T. & VanRullen, R. (2016).** A Feedback Model of Attention Explains the Diverse Effects of Attention on Neural Firing Rates and Receptive Field Structure. *PLoS Comput Biol* 12(2): e1004770.
70. **Senoussi, M., Berry, I., VanRullen, R. & Reddy, L. (2016).** Multivoxel Object Representations in Adult Human Visual Cortex Are Flexible: An Associative Learning Study, *J Cogn Neurosci* 28(6), 852-868.
71. **Zoefel, B. & VanRullen, R. (2016).** EEG oscillations entrain their phase to high-level features of speech sound. *Neuroimage*, 124, 16-13.

Book Chapters since 2016

1. **Sokoliuk, R. & VanRullen, R. (2019).** Perceptual illusions caused by discrete sampling. In *“The illusions of Time: Philosophical and Psychological Essays on Timing and Time Perception”*, Eds: A. Bardon, V. Arstila, S. Power & A. Vatakis. Palgrave Macmillan, pp. 315-338.
2. **VanRullen, R. (2018).** Perceptual Rhythms, in *“Stevens Handbook of Experimental Psychology and Cognitive Neuroscience, Vol 2: Sensation, Perception and Attention”* Ed: J. Serences. Wiley, doi:10.1002/9781119170174.epcn212.

Invited Oral Presentations in International Conferences since 2016

1. **VanRullen, R. (2022).** Deep predictive coding for more robust and human-like vision, Invited presentation, IS 2022: SIAM conference on Imaging Science (online).
2. **VanRullen, R. (2021).** Do deep learning latent spaces resemble human brain representations? NeuroCog 2021 (Louvain, Belgium).
3. **VanRullen, R. (2021).** Deep predictive coding for more robust and human-like vision, Invited presentation, SMB 2021: Annual meeting of the Society for Mathematical Biology (online).
4. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Asia-Pacific Conference on Vision (Osaka, Japan).
5. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, York University VISTA - Centre for Vision Research International Conference on Predictive Vision, Toronto (Canada).
6. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Dynamics of Vision and Touch (DyViTo), Rauischholzhausen (Germany).
7. **VanRullen, R. (2018).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Alpha Scales workshop, European Institute of Theoretical Neuroscience, Paris (France).
8. **VanRullen, R. (2018).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Symposium on New trends in decision-making: decision as inference? Paris (France).
9. **VanRullen, R. (2017).** Perceptual Cycles and Waves, Invited presentation, Timing Research Forum, Strasbourg (France).
10. **VanRullen, R. (2017).** Perceptual Cycles, Invited keynote presentation, Association for the Scientific Study of Consciousness meeting, Beijing, (China).
11. **VanRullen, R. (2017).** Perceptual Cycles in Vision and Audition, Invited presentation, Neural Oscillations in Speech and Language Processing Symposium, Berlin (Germany).

Conference Proceedings since 2016:

1. **Muzellec, S., Alamia, A., Serre, T. & VanRullen, R. (2023).** Benefits of synchrony: Improving deep neural networks using complex values and Kuramoto synchronization. Cognitive Computational Neuroscience (CCN 2023), Oxford (UK).
2. **Bielawski, R., & Vanrullen, R. (2023).** CLIP-based image captioning via unsupervised cycle-consistency in the latent space. ACL 2023: 8th Workshop on Representation Learning for NLP (RepL4NLP 2023).
3. **Chalvidal, M., Serre, T., & VanRullen, R. (2022).** Meta-Reinforcement Learning with Self-Modifying Networks. NeurIPS 2022: Advances in Neural Information Processing Systems, 35.
4. **Alamia, A., Mozafari, M., Choksi, B. & VanRullen, R. (2022).** On the role of feedback in visual processing: a predictive coding perspective. Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
5. **Choksi, B., VanRullen, R. & Reddy, L. (2022).** Do multimodal neural networks better explain human visual representations than vision-only networks? CCN Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
6. **Muzellec, S., Chalvidal, M., Serre, T. & VanRullen, R. (2022).** Accurate implementation of computational neuroscience models through neural ODEs. Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
7. **Ozcelik, F., Choksi, B., Mozafari, M., Reddy, L., & VanRullen, R. (2022).** Reconstruction of perceived images from fMRI patterns and semantic brain exploration using Instance-Conditioned GANs. International Joint Conference on Neural Networks (IJCNN).
8. **Bielawski, R., Devillers, B., Van de Cruys, T., & VanRullen, R. (2022).** When does CLIP generalize better than unimodal models? When judging human-centric concepts. ACL 2022: 5th workshop on Representation Learning for NLP (Rep4NLP 2022)
9. **Decourt, C., VanRullen, R., Salle, D., & Oberlin, T. (2022).** DAROD: a deep automotive radar object detector on range-doppler maps. Proceedings of the 33rd IEEE Intelligent Vehicles Symposium (IV 2022).

10. **VanRullen, R. (2022).** Deep predictive coding for more robust and human-like vision, Invited presentation, IS 2022: SIAM conference on Imaging Science (online).
11. **VanRullen, R. (2021).** Do deep learning latent spaces resemble human brain representations? NeuroCog 2021 (Louvain, Belgium).
12. **VanRullen, R. (2021).** Deep predictive coding for more robust and human-like vision, Invited presentation, SMB 2021: Annual meeting of the Society for Mathematical Biology (online).
13. **Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021).** Does language help generalization in vision models? CoNLL2021: Proceedings of the 25th Conference on Computational Natural Language Learning, 171-182.
14. **VanRullen, R., & Alamia, A. (2021).** GAttANet: Global attention agreement for convolutional neural networks. ICANN 2021: International Conference on Artificial Neural Networks.
15. **Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A., & VanRullen, R. (2021).** Predify: Augmenting deep neural networks with brain-inspired predictive coding dynamics. NeurIPS 2021: Advances in Neural Information Processing Systems, 34.
16. **Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021).** Does language help generalization in vision models? ViGIL workshop, NAACL 2021.
17. **Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2021).** Multimodal neural networks better explain multivoxel patterns in the hippocampus. In Neural Information Processing Systems (NeurIPS) conference: 3rd Workshop on Shared Visual Representations in Human and Machine Intelligence (SVRHM 2021).
18. **Fakche, C., VanRullen, R., Marque, P. & Dugué, L. (2021).** Causal link between the phase and amplitude of spontaneous alpha oscillations, cortical excitability and visual perception. European Conference on Visual Perception (online).
19. **Chalvidal, M., Ricci, M., VanRullen, R., & Serre, T. (2021).** Go with the flow: Adaptive control for Neural ODEs. ICLR 2021: International Conference on Learning Representations.
20. **Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A. & VanRullen, R. (2020).** Brain-inspired predictive coding dynamics improve the robustness of deep neural networks. NeurIPS 2020 Workshop SVRHM
21. **Pang, Z., Choksi, B., Biggs O'May, C. & VanRullen, R. (2020).** Predictive coding results in perceived illusory contours in a recurrent neural network. NeurIPS 2020 Workshop SVRHM
22. **VanRullen, R. & Reddy, L. (2020).** Brain decoding with GANs. WCNF: Winter Conference on Neural Plasticity
23. **Mozafari, M., Reddy, L., & VanRullen, R. (2020).** Reconstructing Natural Scenes from fMRI Patterns using BigBiGAN. Int. Joint Conf. Neural Networks (IJCNN)
24. **Alamia, A., Gauducheu, V., Paisios, D. & VanRullen, R. (2019).** Which neural network architecture matches human behavior in artificial grammar learning? Annual Conference on Cognitive Computational Neuroscience (CCN), Berlin (Germany).
25. **Schwenk, J., Zavitz, E., VanRullen, R., Price, N. S. & Bremmer, F. (2019).** Neural correlates of perceptual echoes in marmoset primary visual cortex. Society for Neuroscience meeting (Chicago, USA).
26. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Asia-Pacific Conference on Vision (Osaka, Japan).
27. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, York University VISTA - Centre for Vision Research International Conference on Predictive Vision, Toronto (Canada).
28. **VanRullen, R. (2019).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Dynamics of Vision and Touch (DyViTo), Rauschholzhausen (Germany).
29. **Luo, C., Brüers, S., Berry, I., VanRullen, R. & Reddy, L. (2019).** fMRI signatures of perceptual echoes in early visual cortex. Vision Sciences Society Annual Meeting, St Pete Beach (USA)
30. **Merholz, G., VanRullen, R. & Dugué, L. (2019).** Oscillations modulate attentional search performance periodically. Vision Sciences Society Annual Meeting, St Pete Beach (USA)
31. **VanRullen, R. (2018).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Alpha Scales workshop, European Institute of Theoretical Neuroscience, Paris (France).
32. **Schwenk, J., VanRullen, R. & Bremmer, F. (2018).** The effects of short-term monocular deprivation on visual perceptual echoes. Society for Neuroscience meeting (San Diego, USA).
33. **VanRullen, R. & Reddy, L. (2018).** Reconstructing faces from fMRI patterns using Generative Adversarial Networks. Annual Conference on Cognitive Computational Neuroscience (CCN), Philadelphia (USA).
34. **Alamia, A. & VanRullen, R. (2018).** Predictive Coding Produces Alpha-band Rhythmic Travelling Waves. Annual Conference on Cognitive Computational Neuroscience (CCN), Philadelphia (USA).
35. **VanRullen, R. (2018).** Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Symposium on New trends in decision-making: decision as inference? Paris (France).
36. **VanRullen, R. (2017).** Perceptual Cycles and Waves, Invited presentation, Timing Research Forum, Strasbourg (France).
37. **Reddy, L., Cichy, R. & VanRullen, R. (2017).** Using DNNs as a yardstick for estimating the representational value of oscillatory brain signals. Annual Conference on Cognitive Computational Neuroscience (CCN), New York (USA).
38. **VanRullen, R. (2017).** Predictive coding and neural communication delays produce alpha-band oscillatory Impulse Response Functions. Annual Conference on Cognitive Computational Neuroscience (CCN), New York (USA).
39. **Reddy, L., Cichy, R. & VanRullen, R. (2017).** Oscillatory signatures of object recognition across cortical space and time. 40th European Conference on Visual Perception (ECPV), Berlin (Germany).
40. **Brüers, S. & VanRullen, R. (2017).** Does alpha power modulate perception independently of endogenous factors? 13th International Conference for Cognitive Neuroscience (ICON), Amsterdam (Netherlands).
41. **Reddy, L., Cichy, R. & VanRullen, R. (2017).** Oscillatory signatures of object recognition across cortical space and time. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
42. **Brüers, S. & VanRullen, R. (2017).** At what latency does the phase of brain oscillations influence perception? Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
43. **Gulbinaite, R., Roozendaal, D. & VanRullen, R. (2017).** Attention effects on steady-state visual evoked potentials in response to 3-80 Hz flicker. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
44. **Edwards, G., VanRullen, R. & Cavanagh, P. (2017).** EEG decoding of pre-saccadic effects on post-saccadic processing. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
45. **Benedetto, A., Lozano-Soldevilla, D. & VanRullen, R. (2017).** Ambient luminance changes modulate oscillatory properties of the visual system. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
46. **Chemla, S., Chavane, F. & VanRullen, R. (2016).** Revealing alpha oscillatory activity using voltage-sensitive dye imaging in monkey V1. European Conference on Visual Perception (Barcelona, Spain).
47. **Edwards, G., Marque, P., VanRullen, R. & Cavanagh, P. (2016).** Predictive position percepts mediated by parietal areas: TMS evidence. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA).
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